
News Release

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Seeking Sassy: Biologists track birds using satellites

It is a crisp day in late April on the U.S. Fish and Wildlife Service's Bear River Migratory Bird Refuge at the north end of Great Salt Lake, Utah. Refuge biologist Bridget Olson and Adrian Farmer, a biologist with the U.S. Geological Survey, work quickly with their quarries, gently attaching satellite transmitters to their backs and colored bands to their legs. The recipients of these devices are two Marbled Godwits, large-sized shorebirds that migrate from southern coastal U.S. and Mexico to breed in the prairie pothole region of North America, James Bay, Canada, and Alaska. .

This marks the first time any migrant shorebird in North America has been fitted with these small, 12 gram solar-powered satellite transmitters. As the birds are released, the pair of scientists hope that the new technology will hold up and convey precise information as to their hourly movements. With luck, the transmitters will provide data for up to 2 years.

Using Google Earth, Olson and Farmer enter the transmitted data points for "Sassy," a godwit headed for Saskatchewan. By this time, Berta, the other godwit, has been in Alberta for 7 days. On May 1, Farmer taps out an e-mail: "Here is this morning's map. [Sassy] arrived in Saskatchewan yesterday or sometime this morning. She is at the west end of Old Wives Lake." He gives precise coordinates of the bird's location to Cheri Gratto-Trevor, a biologist with the Canadian Wildlife Service in Saskatoon. north of Sassy's location.

By May 3, the bird has moved another 100 miles further north. Again Farmer sends the bird's coordinates to Gratto-Trevor. This time, he attaches an image from Google Earth that shows the most recent locations for Sassy on the map, Last Mountain Lake, and includes local road numbers.

The next day, CWS field biologist Phil Taylor heads to Last Mountain Lake National Wildlife Area in south-central Saskatchewan, where Sassy was last located. Not only did he find Sassy and her silver and blue leg bands, but also her new mate. "From this morning's observations, it appears Sassy may be in the process of establishing a territory here," Taylor wrote to Farmer.

Managers at North American wildlife refuges, such as those managed by the U. S. Fish and Wildlife Service, and other natural areas need information about the routes these birds follow, their stopover sites, and where they settle to breed. These areas are critical to the birds' survival. Farmer and Olson, teaming up with Canadian and Mexican biologists, expect the new technology to provide this data.

"I was particularly pleased to learn that Sassy also stopped at our federal Old Wives Lake Migratory Bird Sanctuary," Taylor continued. "It is reassuring to know our system of protected areas really works for the birds."

Others with an interest in migratory birds are also following Sassy's progress closely, including Charles Duncan of the Manomet Center for Conservation Sciences in Manomet, Massachusetts. Duncan and his colleagues coordinate the Western Hemisphere Shorebird Reserve Network, a voluntary coalition of over 200 partner organizations that identifies and promotes conservation of crucial sites for shorebirds. The Network currently has 64 sites in 8 countries, including the three that Sassy visited.

Olson and Farmer are excited about the technology. Says Olson, "It used to be left to chance to recover a banded bird during migration. Between their wintering and breeding grounds, we couldn't identify specifically where they went. Now, we can track an individual bird's movements throughout the year on a daily basis."

"This will help us to link specific breeding and wintering sites, and to inform land and resource managers of the relative importance of various sites along the migration routes," added Farmer.

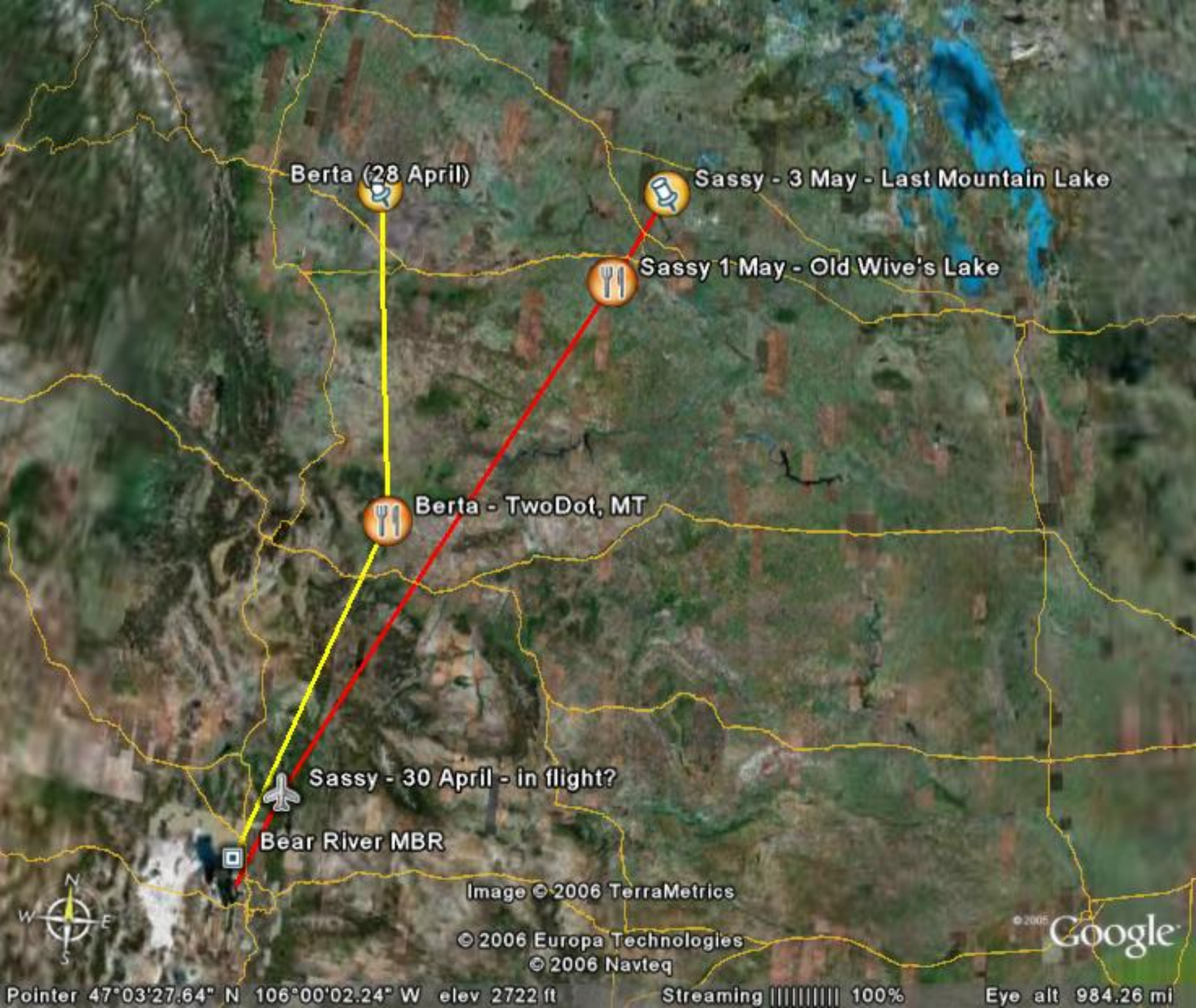
Photo 1: Marbled Godwit just before release at Bear River Migratory Bird Refuge April 13, 2006, outfitted with a lightweight, solar-powered satellite transmitter. Marbled godwits are a species of high concern being tracked to aid in conservation efforts for this bird.

Photo 2: "Sassy" on her chosen breeding ground at Last Mountain Lake National Wildlife Area, Saskatchewan, May 8, 2006. Note transmitter antenna protruding from her back (gray horizontal line) and blue leg band. Photo by Phil Taylor/Canadian Wildlife Service.



Bridget Olson/U.S. Fish and Wildlife Service





Berta (28 April)

Sassy - 3 May - Last Mountain Lake

Sassy 1 May - Old Wive's Lake

Berta - TwoDot, MT

Sassy - 30 April - in flight?

Bear River MBR

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Pointer 47°03'27.64" N 106°00'02.24" W elev 2722 ft

Streaming ||||| 100%

Eye alt 984.26 mi